

CLOUD MEETS ON-PREM

Flexible cloud-connected broadcast & streaming

Beam modernizes traditional broadcast and streaming headend workflows with a cloud-connected, software-based approach. Running on standard COTS servers, it delivers cost-effective, portable, and programmable live video processing. Fully integrated with the MK.IO cloud orchestration layer, Beam enables centralized control, monitoring, and software lifecycle management.

Its flexible commercial models, including pay-as-you-go, multi-year enterprise licenses, and perpetual licenses ensure streamlined procurement and scalability for any deployment.

Tech specs



INPUT

| | |
|------------------|---|
| Compressed input | IP inputs with IGMPv3-based redundancy, dual multicast redundancy, Pro-MPEG FEC, SRT, RTMP, MPEG-2 TS |
| Basedband input | 3G/HD/SD-SDI, SDI over IP (SMPTE ST 2022-6), SMPTE ST 2110 with NMOS IS-04, IS-05 |

BROADCAST OUTPUT

| | |
|--------------|--|
| Formats | SPTS, MPTS |
| Protocol | IP, ASI |
| Multiplexing | Full remuxing with SI/PSI generation, HbbTV, terrestrial |
| Encryption | DVB-CSA, BISS CA, AES, Director |

VIDEO ENCODING

| | |
|-------------------|--|
| Video codecs | HEVC, H.264, MPEG-2 |
| HDR compatibility | HDR10, HLG10, PQ10, and Dolby Vision 8.1 & 5.0 |
| Rate control | CBR, VBR, and CVQ |
| Data rates | 100 kbps to 60 Mbps |

STREAMING OUTPUT

| | |
|--------------------|---|
| Streaming | Apple HTTP Live Streaming (over CMAF or TS), DASH, and RTMP. Low-latency chunking |
| Multi-audio | Multiple audio streams per output for HLS, and DASH |
| Content protection | DRM with CPIX-based key exchange for both HLS (CMAF) and DASH (CMAF). Supported DRMs include FairPlay(HLS/CMAF), and Widevine, PlayReady, and ClearKey (HLS/CMAF and DASH/CMAF) |
| Content publishing | Pull scenarios in just-in-time packaging |
| CDN integration | Interface with leading CDNs, certified with Akamai MSL 4 for HLS and DASH |

MONITORING & CONTROL

| | |
|--------------------|---------------------------|
| Cloud control | MK.IO |
| Interface | Web interface or REST API |
| Standard protocols | SNMP, NTP, IGMP |

AUDIO ENCODING

| | |
|----------------|--|
| Audio codecs | MPEG-1 Layer-II, AAC, AAC 5.1, HE-AAC v1 & v2, HE-AAC 5.1, Dolby Digital (AC3) 2.0 & 5.1, Dolby Digital Plus (E-AC3) 2.0 & 5.1 |
| Audio channels | Up to 8 stereo pairs per service |
| Passthrough | MPEG 1 LII, DD, DD+ |
| Data rates | From 4.75 kbps to 320 kbps (from 64 to 1024 kbps for DD+) |
| Processing | Loudness control |

METADATA AND AD INSERTION

| | |
|---------------------|--|
| Subtitles | Passthrough and translation for EIA 608/708 Closed Captions, SCTE-20, DVB Teletext, DVB Subtitles, SCTE-27, and ARIB B24 |
| Streaming subtitles | WebVTT for HLS, SMPTE-TT for DASH |
| Ad insertion | EBIF/EISS/AIT, SCTE-35 passthrough |
| Nielsen | Watermark extraction for multi-screen devices |

Commercial

Multi-year ELA includes 50% channel capacity uplift, full capability, and Beam Enhanced support.

Perpetual includes decode & encode. Multiplexer/packager priced based on throughput requirements.

ELA

| | Per channel rate |
|--|------------------|
| Premium encode and multiplexer/packager, all-inclusive 150% channels | \$73 /month |

PERPETUAL

| | Per channel rate |
|---------------------------------|------------------|
| Standard encode | \$1,670 |
| Premium Adds UHD and JPEG-XS | \$7,000 |
| + | |
| Multiplexing | \$120 /Mbps |
| Packaging | \$30 /Mbps |

Pricing valid until 06/30/2026

Dimensioning

Beam runs on certified COTS servers or on servers provided by MediaKind.

Broadcast

Maximum capacity for standard channels

A-SERIES

Short form factor, economical, low density

| Maximum capacity | |
|------------------|------------|
| SD AVC | 8 channels |
| HD AVC | 4 channels |
| HD HEVC | 2 channels |

E-SERIES

Standard form factor, high density, high I/O

| Maximum capacity | |
|------------------|-------------|
| SD AVC | 74 channels |
| HD AVC | 47 channels |
| HD HEVC | 20 channels |

H-SERIES

Standard form factor, very high density

| Maximum capacity | |
|------------------|--------------|
| SD AVC | 114 channels |
| HD AVC | 69 channels |
| HD HEVC | 41 channels |

Streaming

Ladder with 5 AVC profiles including 1080i resolution

C-SERIES

2RU multi-slot, standard form factor, high I/O

| Maximum capacity | |
|------------------|------------|
| HD AVC | 5 channels |

E-SERIES

Standard form factor, high density, high I/O

| Maximum capacity | |
|------------------|-------------|
| HD AVC | 21 channels |

H-SERIES

Standard form factor, very high density

| Maximum capacity | |
|------------------|-------------|
| HD AVC | 29 channels |

Support

HARDWARE SUPPORT

Beam Hardware

For Beam deployments on Beam hardware.

- ✓ Hardware repair services
- ✓ MediaKind remote diagnostics
- ✓ Coverage includes Beam hardware and I/O cards (not software)

SOFTWARE SUPPORT

Beam Base

- ✓ Access to ticketing system

Beam Enhanced

Everything in Beam Base and:

- ✓ Reactive support services with service-level agreement (SLA) and service credits
- ✓ Access to latest software releases
- ✓ Technical support ops available on chargeable basis

Beam Premier

Everything in Beam Enhanced and:

- ✓ Assigned customer success manager
- ✓ Dedicated Slack channel
- ✓ 5 hours per month of technical ops support
- ✓ Additional technical support ops hours at discounted rate

SLA response times

| Severity | 1 – Critical | 2 – Major | 3 – Minor | 4 – Technical query |
|----------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------|
| Response | 30 min | 1 hour | 12 business hours | 5 business days |
| Remedy | 8 hours | 16 business hours | Date shared within 10 business days | – |
| Restore | Date shared within 10 business days | Date shared within 10 business days | – | – |

Cold spares

Customers are encouraged to purchase cold spares:

- Ideal for mission-critical environments
- Beam software entitlements are easily transferred to spare units
- Beam licences tied to MK.IO account for seamless reallocation